

What is claimed is:

1. A method for identifying an agent useful for treating an angiogenesis mediated disorder, comprising:
 - a) exposing an agent to HPTPbeta and VEGFR2;
 - b) determining whether the agent modulates HPTPbeta activity and VEGFR2 activity, and
 - c) identifying those agents that modulate HPTPbeta activity and VEGFR2 activity as useful for treating an angiogenesis mediated disorder.
2. The method of claim 1 wherein HPTPbeta and VEGFR2 are expressed in a cell.
3. The method of Claim 1, wherein the amino acid sequence of HPTPbeta is greater than 80% homologous to the amino acid sequence of SEQ ID NO: 2, 9, 15, or 16; and the amino acid sequence of VEGFR2 is greater than 80% homologous to the amino acid sequence of SEQ ID NO: 6, or 11.
4. The method of Claim 1, wherein the amino acid sequence of HPTPbeta is greater than 90% homologous to the amino acid sequence of SEQ ID NO: 2, 9, 15, or 16; and the amino acid sequence of VEGFR2 is greater than 90% homologous to the amino acid sequence of SEQ ID NO: 6, or 11.
5. The method of Claim 1, wherein the amino acid sequence of HPTPbeta has the amino acid sequence corresponding to the amino acid sequence of SEQ ID NO: 2, 9, 15, or 16; and the amino acid sequence of VEGFR2 has the amino acid sequence corresponding to the amino acid sequence of SEQ ID NO: 6, or 11.
6. The method of claim 1, wherein measuring activity of HPTPbeta comprises measurement of hydrolysis of phospho-ester bond of one or more natural or artificial phosphate containing compounds.
7. The method of Claim 1, wherein measuring activity of VEGFR2 comprises measuring changes in free intracellular $[Ca^{2+}]$ in response to a VEGFR2 ligand.

8. A method for identifying an agent useful for treating an angiogenesis mediated disorder, comprising:
 - a) exposing an agent to HPTPbeta, VEGFR2, and Tie-2;
 - b) determining whether the agent modulates HPTPbeta activity, VEGFR2 activity and Tie-2 activity, and
 - c) identifying those agents that modulate HPTPbeta activity, VEGFR2 activity, and Tie-2 activity as useful for treating an angiogenesis mediated disorder.
9. The method of claim 8 wherein HPTPbeta, VEGFR2, and Tie-2 are expressed in a cell.
10. The method of Claim 8, wherein the amino acid sequence of HPTPbeta is greater than 80% homologous to the amino acid sequence of SEQ ID NO: 2, 9, 15, or 16; the amino acid sequence of VEGFR2 is greater than 80% homologous to the amino acid sequence of SEQ ID NO: 6, or 11; and the amino acid sequence of Tie-2 is greater than 80% homologous to the amino acid sequence of SEQ ID NO: 8, or 13.
11. The method of Claim 8, wherein the amino acid sequence of HPTPbeta is greater than 90% homologous to the amino acid sequence of SEQ ID NO: 2, 9, 15, or 16; the amino acid sequence of VEGFR2 is greater than 90% homologous to the amino acid sequence of SEQ ID NO: 6, or 11; and the amino acid sequence of Tie-2 is greater than 90% homologous to the amino acid sequence of SEQ ID NO: 8, or 13.
12. The method of Claim 8, wherein the amino acid sequence of HPTPbeta has the amino acid sequence corresponding to the amino acid sequence of SEQ ID NO: 2, 9, 15, or 16; the amino acid sequence of VEGFR2 has the amino acid sequence corresponding to the amino acid sequence of SEQ ID NO: 6, or 11; and the amino acid sequence of Tie-2 has the amino acid sequence corresponding to the amino acid sequence of SEQ ID NO: 8, or 13.
13. The method of claim 8, wherein measuring activity of HPTPbeta comprises measurement of hydrolysis of phospho-ester bond of one or more natural or artificial phosphate containing compounds.

14. The method of Claim 8, wherein measuring activity of VEGFR2 comprises measuring changes in free intracellular $[Ca^{2+}]$ in response to a VEGFR2 ligand.
15. A method for identifying an agent from a group of one or more candidate agents which have been previously determined to bind to or activate the HPTPbeta, comprising:
 - a) administering the candidate agent to a non-human animal; and
 - b) determining whether the candidate agent regulates angiogenesis in the animal.
16. A method for modulating angiogenesis in a subject in which such a modulation is desirable, comprising:
 - a) identifying a subject in which modulation of angiogenesis is desirable; and
 - b) administering to the subject a safe and effective amount of a modulator of HPTPbeta activity.
17. A pharmaceutical composition, comprising:
 - a) a safe and effective amount of a modulator of HPTPbeta activity; and
 - b) a pharmaceutically-acceptable carrier.